

Title (en)
Synthetic test circuits for short-circuit testing of high-voltage alternating current circuit-breakers, and triggered spark gaps for use in such circuits.

Title (de)
Synthetische Prüfkreise für Kurzschluss tests von Hochspannungs-Wechselstromschaltern sowie getriggerte Funkenstrecken für derartige Kreise.

Title (fr)
Circuits d'essais synthétiques pour essais à court-circuit des disjoncteurs à haute tension et courant alternatif et éclateur déclenchable pour tels circuits.

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Application
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Abstract (en)
A triggered spark gap (TSG1) is provided for use in the high current circuit of a synthetic test circuit for short-circuit testing of high voltage alternating current power transission circuit-breakers. A sealed vessel (1) filled in use with electro-negative gas has two inwardly projecting tubular contacts (2I, 22) forming a spark gap between carbon nozzles (2II, 22I) at their inner ends with a trigger electrode (23) in one of the nozzles (22I). A pressure chamber to contain an arc initiated by the trigger electrode (23) includes a movable cylinder (30) closed at one end on to one of the contacts (2I) and closed on to the other contact (22) via a fixed piston (40), the cylinder (30) carrying a movable contact (50). Arc generated gas pressure expands the pressure chamber so that the movable contact (50) rapidly bridges the tubular contacts (2I, 22) to short out the arc. <IMAGE>

IPC 1-7
G01R 31/32; H01H 33/04

IPC 8 full level
G01R 31/02 (2006.01); **G01R 31/333** (2006.01); **H01H 33/04** (2006.01); **H01H 33/59** (2006.01); **H01T 2/02** (2006.01)

CPC (source: EP)
G01R 31/3336 (2013.01); **H01H 33/045** (2013.01)

Citation (search report)
• [A] DE 2900753 A1 19800626 - BBC BROWN BOVERI & CIE
• [A] DE 2719135 A1 19771124 - ASS ELECT IND
• [A] DE 3217167 A1 19831013 - BBC BROWN BOVERI & CIE [CH]
• [A] CH 513407 A 19710930 - SPRECHER & SCHUH AG [CH]
• [A] IEEE TRANSACTIONS ON POWER SYSTEMS vol. PWRD1, no. 2, April 1986, NEW YORK US pages 75 - 80 L.M.J. VRIES ET AL. 'A REIGNITION INSTALLATION WITH TRIGGERED VACUUM GAPS FOR SYNTHETIC FAULT INTERRUPTION TESTING'

Cited by
EP1376633A1; CN109212410A; CN111562493A; CN114879022A; US8861144B2; WO03107369A1

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DOCDB simple family (application)
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